

**A METHOD FOR STANDARDIZING REPORTING OF ISSUES,
ASSUMPTIONS, AND RISKS FOR A RISK REVIEW BOARD**

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BACKGROUND OF THE INVENTION

Priority:

This application claims the benefit of the filing
date of corresponding U.S. Provisional Patent Application
10 Serial No. 60/460,073, entitled "Method for Standardizing
Reporting of Issues, Assumptions and Risks for a Risk
Review Board", filed April 3, 2003, the contents of which
are hereby incorporated herein for all purposes.

15 **1. Technical Field:**

The present invention relates generally to computer
software and, more particularly, to business methods,
and, still more particularly, to methods for managing
risks for an enterprise.

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2. Description of Related Art:

Risk can be defined as the possibility as suffering
loss. In business, loss is typically measured in
monetary terms, but the causes of monetary loss are many
25 and related to many different risks. For example, in a
development project, the loss describes the impact to the
project which could be in the form of diminished quality
of the end product, increased costs, delayed completion,
or failure. Therefore, risk is something that businesses

would prefer to avoid. However, risk and opportunity go hand in hand and in order to achieve profits, it is necessary to take risks. For example, many development projects strive to advance current capabilities and
5 achieve something that hasn't been done before. Thus, the opportunity for advancement cannot be achieved without taking risk

However, risks can be minimized by proper attention to risk management, i.e., the proper balancing of the
10 possible negative consequences of risk against the potential benefits of its associated opportunity. Many risk management schemes have been developed to aid managers in this process. However, one drawback to current schemes is that often the risk manager fails to
15 adhere to all aspects of a risk management scheme, thus increasing the risk to the business without increasing the possible benefits to the business. Therefore, it would be desirable to have a computer program product, method, and system that increases the probability that a
20 risk manager will adhere to all aspects of a risk management scheme.

SUMMARY OF THE INVENTION

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The present invention provides a method, system, and computer program product for standardizing reporting of issues, assumptions, and risks for a risk review board. In one embodiment, a risk management tool presents a user
10 with a form for entering information about a risk management unit, such as, for example, a risk, assumption, issue, or risk plan. The risk management tool then receives information about the risk management unit from the user through the form. The form provides
15 the user with entry areas for every element needed to properly adhere to a risk management scheme for the particular risk management unit. Furthermore, the user is hindered or prevented from exiting the form prior to supplying all information necessary for adherence to the
20 risk management scheme. Thus, the risk management tool increases the likelihood that risk managers adhere to a risk management scheme, thus minimizing the occurrence of identified risks.

BRIEF DESCRIPTION OF THE DRAWINGS

5 The novel features believed characteristic of the invention are set forth in the appended claims. The invention itself, however, as well as a preferred mode of use, further objectives and advantages thereof, will best be understood by reference to the following detailed
10 description of an illustrative embodiment when read in conjunction with the accompanying drawings, wherein:

Figure 1 depicts a pictorial representation of a distributed data processing system in which the present invention may be implemented;

15 **Figure 2** depicts a block diagram of a data processing system which may be implemented as a server in accordance with the present invention;

Figure 3 depicts a block diagram of a data processing system in which the present invention may be
20 implemented;

Figure 4 depicts a process flow and program function diagram in accordance with one embodiment of the present invention;

Figure 5 depicts an exemplary screen presented to a
25 user upon opening the Risk Management Tool in accordance with one embodiment of the present invention;

Figure 6 depicts an exemplary screen for entering information for a new issue in accordance with one embodiment of the present invention;

Figure 7 depicts exemplary windows displayed when
5 saving an issue in accordance with one embodiment of the present invention;

Figures 8A and 8B depict windows associated with entering and updating assumption records into the Risk Management Tool in accordance with one embodiment of the
10 present invention;

Figures 9A - 9C depict windows associated with entering and updating risk records into the Risk Management Tool from the Assumption screen in accordance with one embodiment of the present invention;

Figures 10A - 10C depict various screen shots
15 illustrating development of risk plans utilizing the Risk Management Tool of the present invention;

Figure 11 depicts a screen related to configuring and displaying reports in accordance with one embodiment
20 of the present invention;

Figures 12A-12B depict screens related to browsers include in the Risk Management Tool in accordance with one embodiment of the present invention; and

Figure 13 depicts an exemplary screen illustrating
25 adding keywords to the Risk register in accordance with one embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

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With reference now to the figures, and in particular with reference to **Figure 1**, a pictorial representation of a distributed data processing system is depicted in which the present invention for prodding a risk manager to
10 adhere to a risk management scheme may be implemented.

Distributed data processing system **100** is a network of computers in which the present invention may be implemented. Distributed data processing system **100** contains network **102**, which is the medium used to provide
15 communications links between various devices and computers connected within distributed data processing system **100**. Network **102** may include permanent connections, such as wire or fiber optic cables, or temporary connections made through telephone connections.

20 In the depicted example, server **104** is connected to network **102**, along with storage unit **106**. In addition, clients **108**, **110** and **112** are also connected to network **102**. These clients, **108**, **110** and **112**, may be, for example, personal computers or network computers. For
25 purposes of this application, a network computer is any computer coupled to a network that receives a program or other application from another computer coupled to the network. In the depicted example, server **104** provides

data, such as boot files, operating system images and applications, to clients **108-112**. Clients **108**, **110** and **112** are clients to server **104**. Distributed data processing system **110** may include additional servers, clients, and other devices not shown. Distributed data processing system **100** may also include printers. A client, such as client **110**, may print directly to printer **114**. Clients such as client **108** and client **112** do not have directly attached printers. These clients may print to printer **116**, which is attached to server **104**, or to printer **118**, which is a network printer that does not require connection to a computer for printing documents. Client **110**, alternatively, may print to printer **116** or printer **118**, depending on the printer type and the document requirements.

In the depicted example, distributed data processing system **100** is the Internet, with network **102** representing a worldwide collection of networks and gateways that use the TCP/IP suite of protocols to communicate with one another. At the heart of the Internet is a backbone of high-speed data communication lines between major nodes or host computers consisting of thousands of commercial, government, education, and other computer systems that route data and messages. Of course, distributed data processing system **100** also may be implemented as a number of different types of networks such as, for example, an intranet or a local area network.

A person or persons responsible for enforcing risk management schemes on an organization enters appropriate risk data into the system, as will be discussed in great detail below, through any one of clients **108-112**. This data is gathered by the persons responsible for enforcing risk management schemes through interviewing managers and others responsible for various areas of an enterprise. Managers or other members in any particular area of the organization are not able to edit the data, but are able to view data through a client, such as any of clients **108-112**. Thus, for example, in a large organization in which many people work on a project unknown to others in a project, risks identified by one area are provided to people in other areas within the enterprise and these people may have expertise as to how to address this identified risk that the people in the other area did not have. However, in previous systems, the people with expertise as to how to address the risk may not even know of the risk.

Figure 1 is intended as an example and not as an architectural limitation for the processes of the present invention.

Referring to **Figure 2**, a block diagram of a data processing system which may be implemented as a server, such as server **104** in **Figure 1**, is depicted in accordance with the present invention. Data processing system **200** may be a symmetric multiprocessor (SMP) system including a plurality of processors **202** and **204** connected to system

bus **206**. Alternatively, a single processor system may be employed. Also connected to system bus **206** is memory controller/cache **208**, which provides an interface to local memory **209**. I/O bus bridge **210** is connected to
5 system bus **206** and provides an interface to I/O bus **212**. Memory controller/cache **208** and I/O bus bridge **210** may be integrated as depicted.

Peripheral component interconnect (PCI) bus bridge **214** connected to I/O bus **212** provides an interface to PCI
10 local bus **216**. A number of modems **218-220** may be connected to PCI bus **216**. Typical PCI bus implementations will support four PCI expansion slots or add-in connectors. Communications links to network computers **108-112** in **Figure 1** may be provided through
15 modem **218** and network adapter **220** connected to PCI local bus **216** through add-in boards.

Additional PCI bus bridges **222** and **224** provide interfaces for additional PCI buses **226** and **228**, from which additional modems or network adapters may be
20 supported. In this manner, server **200** allows connections to multiple network computers. A memory mapped graphics adapter **230** and hard disk **232** may also be connected to I/O bus **212** as depicted, either directly or indirectly.

Those of ordinary skill in the art will appreciate
25 that the hardware depicted in **Figure 2** may vary. For example, other peripheral devices, such as optical disk drives and the like, also may be used in addition to or in place of the hardware depicted. The depicted example

is not meant to imply architectural limitations with respect to the present invention.

Data processing system **200** may be implemented as, for example, an AlphaServer GS1280 running a UNIX®

5 operating system. AlphaServer GS1280 is a product of Hewlett-Packard Company of Palo Alto, California.

"AlphaServer" is a trademark of Hewlett-Packard Company.

"UNIX" is a registered trademark of The Open Group in the United States and other countries

10 With reference now to **Figure 3**, a block diagram of a data processing system in which the present invention may be implemented is illustrated. Data processing system **300** is an example of a client computer. Data processing system **300** employs a peripheral component interconnect
15 (PCI) local bus architecture. Although the depicted example employs a PCI bus, other bus architectures, such as Micro Channel and ISA, may be used. Processor **302** and main memory **304** are connected to PCI local bus **306** through PCI bridge **308**. PCI bridge **308** may also include
20 an integrated memory controller and cache memory for processor **302**. Additional connections to PCI local bus **306** may be made through direct component interconnection or through add-in boards. In the depicted example, local area network (LAN) adapter **310**, SCSI host bus adapter
25 **312**, and expansion bus interface **314** are connected to PCI local bus **306** by direct component connection. In contrast, audio adapter **316**, graphics adapter **318**, and audio/video adapter (A/V) **319** are connected to PCI local

bus **306** by add-in boards inserted into expansion slots. Expansion bus interface **314** provides a connection for a keyboard and mouse adapter **320**, modem **322**, and additional memory **324**. In the depicted example, SCSI host bus
5 adapter **312** provides a connection for hard disk drive **326**, tape drive **328**, CD-ROM drive **330**, and digital video disc read only memory drive (DVD-ROM) **332**. Typical PCI local bus implementations will support three or four PCI expansion slots or add-in connectors.

10 An operating system runs on processor **302** and is used to coordinate and provide control of various components within data processing system **300** in **Figure 3**. The operating system may be a commercially available operating system, such as Windows XP, which is available
15 from Microsoft Corporation of Redmond, Washington. "Windows XP" is a trademark of Microsoft Corporation. An object oriented programming system, such as Java, may run in conjunction with the operating system, providing calls to the operating system from Java programs or
20 applications executing on data processing system **300**. Instructions for the operating system, the object-oriented operating system, and applications or programs are located on a storage device, such as hard disk drive **326**, and may be loaded into main memory **304** for execution
25 by processor **302**.

Those of ordinary skill in the art will appreciate that the hardware in **Figure 3** may vary depending on the implementation. For example, other peripheral devices,

such as optical disk drives and the like, may be used in addition to or in place of the hardware depicted in

Figure 3. The depicted example is not meant to imply architectural limitations with respect to the present invention. For example, the processes of the present invention may be applied to multiprocessor data processing systems.

With reference now to **Figure 4**, a process flow and program function diagram illustrating a high level view of the risk management system is depicted in accordance with one embodiment of the present invention.

To begin, a person involved in enforcing adherence to a risk management scheme (risk manager) interviews people involved in all areas of the enterprise involved in the project for which the risk is associated (step **402**). Thus, information necessary for adherence to the risk management scheme is obtained. Next, this data is entered into the risk management software (step **404**). The software, as described below, is configured so as not to allow the risk management person to continue through the software until appropriate information necessary for adherence to the risk management scheme has been entered. Therefore, the software determines whether all information needed for proper adherence to the risk management system has been gathered (step **406**). If information has been omitted, then the risk manager interviews appropriate people (step **402**) if necessary to

obtain the missing information and enters the missing information into the system (step **404**).

If the appropriate and necessary information for adhering to the risk management system has been entered, then the data entered into the system is made available to other participants in the project in the form of, for example, reports and graphs (step **408**). However, the other participants are not able to modify the data, but are merely able to access some or all of the data. Updates to the system, identified by participants or by risk managers may be made by risk managers as necessary (step **410**).

Turning now to **Figures 5-15**, a specific exemplary detailed embodiment of a Risk Management Tool will be described. **Figure 5** depicts an exemplary screen presented to a user upon opening the Risk Management Tool according to one embodiment of the present invention.

On starting the Risk Management Tool, the screen **500** depicted in **Figure 5** is presented to the user. This screen **500** consists of a collection of navigation buttons and is known as the Main Menu. The user is able to return directly to this screen from most other screens in the application. The four main buttons **501-504** in the centre of the screen **500** give direct access to the four entities described in the ABCD methodology: Issues, Assumptions, Risks and Risk Plans. The additional buttons **505-509** at the bottom of the screen **500** offer the user various other features that are explained below.

The Main Menu (and all other screens) can be operated with both the mouse and the keyboard. If one prefers to use the keyboard to operate the buttons, then there are two main methods:

- 5 • Navigate across the buttons using the Tab key, and then press the Enter key.
- Use the Alt key in conjunction with the appropriate underlined letter, e.g. Names **508** can be accessed using Alt + N.

10 In addition to the navigation buttons the Main Menu **500** also contains a number of dropdown menus available from the menu bar **510** at the top of the screen **500**. Clicking on File **511** provides just the single option to Exit the application. The Add menu **512** has two choices:

15 Owner/Action Manager, which is described in more detail below; and Keywords, which is also described in more detail below. The Browsers menu **513** allows immediate access to the Issues, Assumptions, Risks and Risk Plans Browsers, each of which are described in more detail

20 below. The Reports Menu **514** allows immediate access to the following reports:

- Risk Review Board Report
- Driver Report
- Interview List
- 25 • Summary Reports
- Bubble Charts
- Sens/Stab Chart

- Statistics Report
- Reports Menu.

The Help menu **515** offers, among other items, the following: Data Transfer and Registration.

5 Data Transfer is a facility that is explained in detail below. The Registration window contains the registration details for the database and also allows the user to modify the organization name and register title. It is also possible to replace the supplied logo, if necessary,
10 by pasting in an appropriate graphic image in the box provided.

It is recommended that certain lists be completed before any records have been added to the register as described below. There are two keyword fields available
15 in the Risk Management Tool Risk Register that are used as filters for the reports. It is recommended that Keyword1 be used to identify the reporting level at which the Issue, Assumption or Risk is currently being managed, e.g. "Programme". Also, each record in the register must
20 be owned by someone. The list of possible names should be set up before any records have been added to the register. The recommended format is First Name followed by Surname.

In normal circumstances the user will want to update
25 an existing Issue record or will want to create a new Issue. Selecting the Issues button **501** on the Main Menu **500** will return a Pop-Up screen allowing the user to select a new issue or update an existing issue. In order

to update an existing Issue, enter the Issue Reference Number in an entry box and click on the Find Issue button. In order to create a new Issue record click on the New Issue button. It is also possible to go directly
5 to the Issue Browser screen by clicking.

If a new issue is selected, then screen **610** as depicted in **Figure 6** will be returned. Note that the Status Bar **611** at the bottom of the screen **610** contains useful prompts for each field in the screen **610**. This
10 applies to all data input screens.

On creating a new Issue record, this date field **612** will be given the current date by default. The date may be amended to an earlier date if necessary. Any date entered in this field **612** will always be displayed in the
15 dd/mm/yyyy format, although it may be entered in a variety of ways. One may, for example include or omit the slash '/' separators. One may enter a two-digit or four-digit year number. If one were to type in '1/9/2' this would be interpreted as '01/09/2002'. Note that this
20 applies to all date fields used in the register.

The cursor will be placed initially in the Title field **613**. The user should enter the details of the Issue in the form of an open question. The title should normally begin with words such as "How", "What" or
25 "When". Note that starting the title with the word "Will" will almost certainly result in a "closed" question!

Every Issue, Assumption, Risk and Risk Plan must be owned by a single person. This owner field **614** is therefore a mandatory field and is completed using the drop-down list of names. If the required name is not
5 included in the list then it may be added by typing the name into the field **614** and then moving on to the next field. If the name is not in the list then a dialog window will appear. Click No in the dialog box if you change your mind and the window will close, returning an
10 error message. Respond to this error message by clicking "OK" and Risk Management Tool will return to the drop-down list. Clicking on "Yes" in the new dialog window will produce a further owner/action manager name dialog window.

15 The user should enter at least the Name and Department of the Owner on this form in owner/action manager name dialog window. Pressing the Save button will add the new record and return the user to the Issue screen **610**. Note that there is a single table containing
20 the list of names and this list is used for both Owners and Action Managers. Once a name has been added to the list, in this embodiment of the Risk Management Tool, it cannot be removed, but it may be amended. However, other embodiments may provide for the removal of names.

25 Returning to **Figure 6**, the size field **615**, in this embodiment, is mandatory. The user must select A, B, C or D from the drop-down menu. The driver field **616** is also mandatory in this embodiment. The user must select

Decision, Milestone, Resource, Technical, Dependency or Business from the drop-down menu.

There are two keywords available for Issues, Assumptions, Risks and Risk Plans. The use of these two
5 fields **617** and **618** is at the discretion of the user's organization. Keyword1, for example, may indicate the reporting level for the Issue and Keyword2 may contain the name of the Project. The keywords may then be used in combination as filters for the production of various
10 management reports.

The Keyword1 and Keyword2 lists will normally be created at the start of a project using screens described in more detail below. However, if a new Keyword needs to be added at this point then the user should enter the new
15 keyword into the field **617** or **618**.

Notice that the Risk Management Tool register is supplied with the keyword 'ALL' in both Keyword1 and Keyword2. This is included in the list to allow the user to select all possible keywords for a specific report.
20 Although it appears as a default for new records, it should be replaced by a more suitable choice immediately.

The milestone/dependency field **619** is not mandatory. Issues which are open questions normally arise before project plans have been finalized and, in this case, this
25 field would have no meaning. However, where a Risk has impacted and the problem is converted to an Issue, there may well be a milestone to enter in the field **619**. If the Driver inserted at field **616** above is "Dependency" then

this milestone/dependency field **619** should also include a reference to the name of the particular dependency.

The summary of actions taken field **620** is used to record a summary of all the actions that have been taken
5 to-date. The field **620** is included on both the single Issue report and on the Issue Summary Report. The field **620** is not intended to hold detailed notes of any meetings or discussions. These are held in a separate Notes field as described below. Note that this summary of
10 actions taken field **620** should be updated following each interview.

The next actions field **621** should contain details of the next actions to be taken to resolve the Issue. Leaving this field blank will indicate a distinct lack of
15 management of the issue. For every Issue there is always some action that can be taken. At the very least, the Issue Owner should be able to arrange a meeting with someone who can help. Try to include the following:

- WHAT actions are planned?
- 20 • WHO is going to carry out these actions?
- WHEN must the actions start?
- WHEN do the actions need to be completed?

Just as every Issue, Assumption, Risk and Risk Plan must have an Owner; it must also have a person who is
25 appointed to take appropriate action. This action manager field **622** is mandatory in this embodiment and should be a different person than the Owner. Operation of the field is identical to the Owner field described above,

including adding new names to the list. This action manager field **622** is inescapably linked to the Next Actions field. There may be many actions identified. The Action Manager is the person responsible for the
5 action that is due to be completed first.

The resolve by date field **623** contains the agreed date by which the Issue needs to be resolved. The user can make use of the accompanying calendar button **624**. At the end of an interview with the Issue Owner, the risk
10 practitioner should arrange the follow-up interview and select the appropriate date in the next review field **625**. Since Issues need to be resolved urgently, this date should never be more than one month after the date of the interview.

15 Having entered data into each field **612-625**, the user should now save the record by pressing the Save Record button **626**. If the data is free from errors, a window indicating this fact will be displayed. This indicates that the record has been successfully saved and
20 shows the Issue Reference Number allocated to it. Clicking on OK on this window will cause a number of extra fields and navigation buttons **711-716** to appear as shown in screen **710 Figure 7**.

The Date Closed field **717** will remain blank while
25 the Issue is live. Once the Issue has been resolved (or converted to an Assumption), the Issue should be closed by entering the appropriate date in this Date Closed field **717**. This field **717** is accompanied by a calendar

button **718**. The actions of the various navigation buttons **711-716** at the foot of the screen **710** is described as follows:

- 5 • Select Issue **711**. Use this button to select another Issue record for viewing/updating. Pressing this button **711** will produce the Add/Update Issue Records pop-up screen as described above.
- 10 • Preview Report **712**. This button **712** will preview the single Issue Interview Sheet. The user may then choose to print the report or not.
- Print Report **713**. This button **713** prints the single Issue Interview Sheet without giving a preview.
- 15 • New Issue **714**. Press this button **714** to create another new Issue and the "New Issue" screen **610** shown at **Figure 6** will appear.
- Issue Browser **715**. This button **715** will open up the Issue Browser screen as described below.
- 20 • Main Menu **716**. This button **716** is present in the bottom right-hand corner of most screens and will return the user to the Main Menu **500** as described above with reference to **Figure 5**.

25 Clicking on the Notes Button **719** produces a meeting notes pop-up window. Each Issue can have any number of Notes records for a given Issue record. If there are no associated notes, then a meeting notes pop-up window will appear containing form with a number of fields.

Completion of the form provided in the meeting notes pop-up window is as follows:

- **Date field.** The Date field will already be completed with the current date. This field may be amended to the date on which the interview/meeting took place (Shift+Tab to move backwards across the fields).
- **Person/Meeting.** The name of the Issue Owner will be entered automatically in the Person/Meeting field and may be amended, if required. If, for example, the notes were taken from a Risk Review Board then it would be expedient to enter 'RRB'.
- **Notes.** Enter all the notes taken during the meeting. It is particularly important to record any changes to the data fields in the Issue record and the justification for the change, e.g. "Issue Size changed from C to B following success of first action". Having entered the data, save the record by clicking on the Save Record button. If an Issue already has associated Notes records, then the latest notes will be displayed when choosing the Notes button. It is possible to view/amend earlier notes by pressing the Earlier Notes button on the Notes pop-up form. One can scroll forward in time by pressing the Later Notes button. Where no further notes are available a suitable message will be displayed

and the corresponding button will be grayed out (disabled).

The meeting notes form will remain on screen until the Close Form button is pressed. It is possible to "cut and paste" data from the Notes form into the underlying Issue record using the standard Windows techniques - Ctrl+C (cut) and Ctrl+V (paste) recommended. If changing to a different Issue record, it is possible to leave the meeting notes form visible on screen whilst the change is made. As the change of Issue is made, the meeting notes form will change automatically. Similarly, it is possible to leave the meeting notes form on the screen when running the Print Preview. However, if the user exits the Issue via the Issue Browser or the Main Menu, then the meeting notes form will automatically close.

Each of the data input screens contains at least one field that requires a date to be input. To help ensure that sensible dates are used, most of these fields are accompanied by a small calendar button. Pressing this button will produce a pop-up calendar. Select the date required by using the navigation buttons and double-clicking on the appropriate day. This will update the corresponding date field.

Turning now to **Figures 8A** and **8B**, the actions associated with assumptions and the results of selecting the Assumptions button **502** depicted in **Figure 5** will be described. Selecting the Assumptions button **502** on the Main Menu **500** depicted in **Figure 5** will return an

add/update assumption records Pop-Up screen. In order to update an existing Assumption, enter the Assumption Reference Number in the ID field and click on the Find button. To create a new Assumption record click on the
5 New Assumption button.

If one has chosen to create a new Assumption, the screen **810** as depicted in **Figure 8A** will be returned. The assumption title field **811** is a mandatory field and must be in the form of a "single, simple, positive
10 statement". It is not necessary to begin the statement with words such as "It is assumed that" - this is implicit in the title. However, Assumption statements will normally include the word "will". The owner field **812** is mandatory. The action manager **812** is also
15 mandatory in this embodiment. In this embodiment, the date opened field **814** is also mandatory. The default is the current date, but this may be amended to an earlier date. The keywords fields **815** and **816** and the driver field **817** are also mandatory for reasons as explained
20 above with reference to the Issues screens.

The Milestone / Dependency field **818** is not mandatory in the present version of Risk Management Tool. However, since Assumptions are based on project plans, there should be a milestone entered in this field **818** for
25 most Assumptions. Where the Driver **817** is "Dependency" then this field **818** should also include a reference to the name of the particular dependency. The summary of

actions taken field **819** is similar to the corresponding field **620** in **Figure 6**.

The sensitivity drop down list **820** provides the user with four options from which to choose. These options

5 are as follows:

- A Minimal impact if Assumption is incorrect;
- B Manageable impact if Assumption is incorrect;
- C Significant impact if Assumption is incorrect; and
- D Critical impact if Assumption is incorrect.

10 The Stability drop down list **821** also provides four options from which a user can choose. These options from the drop-down box **821** are as follows:

- A - Very confident that Assumption is correct;
- B - Fairly confident that Assumption is correct;
- 15 C - Uncomfortable that Assumption is correct; and
- D - Assumption almost certainly untrue.

The sensitivity field **820** is a mandatory field in the present embodiment. The interviewee should always justify the reason for the choice of Sensitivity Rating (A, B, C
20 or D). The Stability field **821** is a mandatory field in the present embodiment. The interviewee should always justify the reason for the choice of Stability Rating (A, B, C or D). The Next Actions field **822** should contain details of any actions to be taken to prevent the
25 Assumption becoming a Risk. Leaving this field **822** blank will indicate a distinct lack of interest in the Assumption. This implies a lack of management and begs the question as to why the Assumption is even on the

register. Where actions have been identified, try to include the following:

- WHAT actions are planned?
- WHO is going to carry out these actions?
- 5 • WHEN must the actions start?
- WHEN do the actions need to be completed?

The field **822** does not need to be updated where there is an associated active Risk record.

At the end of an interview with the Assumption
10 Owner, the Risk Practitioner should arrange the follow-up interview and entered into the next review field **823**. Usually this date will be one month after the date of the interview. However, where any actions are scheduled to take place some time in the future then it is sensible to
15 arrange the review accordingly.

Having entered data into each field **811-823**, the user should now save the record by pressing the Save Record button **824**. If mandatory fields have been left blank then a suitable error message will be displayed.
20 If the data is subsequently free from errors, this will result in a message window indicating that fact and an OK button. This indicates that the record has been successfully saved and shows the Assumption Reference Number allocated to it. Clicking on OK in this message
25 window will cause a number of extra fields and navigation buttons to appear as shown in **Figure 8B**.

Referring now to **Figure 8B**, the Assumption Reference field **841** shows the number allocated to the new

Assumption. The date closed field **842** shows the date the assumption is closed. This field is initially blank. Assumptions should be closed only after any associated Risk record has been closed. Even in situations where a
5 Risk has been closed, it is usual to leave the underlying Assumption open until all possible influencing factors have disappeared. The reasons for closure must be recorded in the Summary of Action Taken field **845** before closing the Assumption. If the date of closure is the
10 current date then the user may just press the "Close" button **846** to the right of the field **842**. Note that there is also a "Re-open" button **847**, which will remove the Date Closed from the record. Note that a date in this field automatically implies that the Assumption is closed
15 when reports are being produced.

The Associated Risk field **843** will be empty when an Assumption is initially created. However, once a Risk record is raised from the Assumption, then the reference number and other details will appear here. Pressing the
20 View button **848** will present an Update Risk Record window allowing the user to find a risk record by entering a risk ID.

The Vertical/Horizontal Offsets fields **844** control the position of the small Assumption bubble on a
25 Sensitivity/Stability Chart.

Each Assumption record should have its own set of associated Notes records. Pressing the Notes button **849**

produces pop-up window allowing a user to enter new notes.

The actions of the various navigation buttons **850-856** at the foot of the Assumption screen **840** are

5 described as follows:

- Find Assumption **850**. This will produce the same Add/Update Assumption Records pop-up screen as described above.
- 10 • Preview Report **851**. This button **851** will preview the single Assumption Interview Sheet. The user may then choose to print the report or not.
- Print Report **852**. This button **852** prints the single Assumption Interview Sheet without giving a preview first.
- 15 • Create New Risk **853**. If the Sensitivity/Stability Rating of an Assumption is 'CC', 'CD', 'DC' or 'DD', then the user must create an associated Risk record. This button **853** opens a new window for creating a new risk
- 20 and is described in more detail below with reference to **Figure 9A**.
- New Assumption **854**. This button **854** produces the New Assumption screen as shown in **Figure 8A** and described above.
- 25 • Assumption Browser **855**. This button **855** will open up the Assumption Browser screen.

- Main Menu **856**. This button **856** is present in the bottom right-hand corner of most screens and will return the user to the Main Menu as shown in **Figure 5** and described above.

5 If the Sensitivity/Stability Rating of an Assumption is 'CC', 'CD', 'DC' or 'DD', then the user must create an associated Risk record. The Create New Risk button will return a New Risk screen as shown in **Figure 9A** and described below.

10 Turning now to **Figures 9A-9C**, the actions associated with risks and the results of selecting the Create New Risk button **503** from the Assumption screen depicted in **Figure 8B** will be described. Pressing the Create New Risk button **853** on the Assumption screen **840** depicted in
15 **Figure 8B** will present a New Risk input screen **900** as shown in **Figure 9A**. Notice that most of the fields on this screen **900** have been inherited from the details in the underlying Assumption record. The Assumption Reference field **901** shows the reference number of the
20 underlying Assumption record. The Title field **811** on the Assumption record **810** is shown on this screen **900**. It cannot be amended here. If any change to the title is required, then this must be carried out on the Assumption record screen **810**.

25 Since the Assumption title is already visible, it is only necessary to describe the impact if the Assumption fails. This If Not, Then Describe Impact field **902** will be automatically completed with the Why Sensitivity field

825 from the Assumption record **810** to assist with completion. However, note that the impact of a Risk is a top-down view from the Risk Review Board, and not a bottom-up view from the Assumption Owner.

5 The Risk Owner field **903** will be populated with the name of the Assumption Owner. Since it is likely that the Owner of the Risk is a different person the field will require amending in the same way as described above. The Owner of a Risk must be a member of the Risk Review
10 Board. The Date Opened field **904** will default to the current date. An earlier date may be input, if required. The keyword1 and keyword2 fields **905** and **906** will be the same as the underlying Assumption. It is possible to amend each of these fields **905** and **906** as described
15 above.

 The Driver field **907** will be the same as the underlying Assumption. It is possible to amend the field by using the drop-down list. Note that changing this field **907** does not change the equivalent field on the
20 underlying Assumption record. This also applies to Milestone/Dependency field **908**. The Milestone/Dependency field **908** will be the same as the underlying Assumption. The Summary of Actions Taken field **909** will inherit the same details as the underlying Assumption, but may be
25 amended, if necessary. Note that the link to the Assumption record is not permanent. The summary should contain enough information to explain to the Risk Review

Board how the risk came about and what actions have been taken to-date.

The Impact Date field **910** is a mandatory field that must be a date in the future. The date refers to the last possible start date for action to take place to avoid the impact of the risk. The field should reflect the latest start date of the earliest action identified at next action described below. The Criticality field **911** refers to the traditional Red, Amber, Green impact rating of the Risk. Initially, this field **911** will be supplied by the Assumption Owner, but must be ratified by the Risk Review Board. A guide to the values for a typical project is:

- Red: Project stopped or unable to meet key objectives (Showstopper!)
- Amber: Project objectives impacted significantly
- Green: Project may face minor delays or cost setbacks

It is possible to choose the "OFF" option if the Assumption Owner is not prepared to give a Criticality rating. However, this must be changed to Red, Amber or Green following the Risk Review Meeting. Note that although a record is created within the Risk Management Tool Risk Register, a "Risk" does not technically exist until agreed at the Risk Review Meeting.

The Controllability field **912** describes the degree of control that the Risk Review Board feel they have in managing or preventing the Risk.

- 5 • A - Very Confident. The management can exercise much control over the Risk. Action plans are in place and are proving successful.
- B - Fairly Confident. The Risk is mainly under control. Action plans are in place and in progress.
- 10 • C - Uncomfortable. The Risk is mainly outside control. There are minimal action plans.
- D - Out of Control. There is currently no idea how to manage the Risk, or actions that have been identified have not proved successful. In the
- 15 latter case, the Risk will almost certainly need to be escalated to a higher authority.

Initially this field **912** will be supplied by the Assumption Owner, but must be ratified at the next Risk Review Meeting. Where the Assumption Owner is not

20 prepared to supply a Controllability rating, then it is usual to use the Stability rating.

The Cost field **913** is optional. Enter the cost of any Risk Action, if required. The Next Actions field **914** should show the action(s) that have been identified to

25 prevent the Risk from occurring. Although this is currently an optional field, it must not be left blank. Leaving this field blank demonstrates a distinct lack of management of the Risk, which begs the question as to why

the underlying Assumption has been rated as a Risk.
Where actions have been identified, try to include the following:

- WHAT actions are planned?
- 5 • WHO is going to carry out these actions?
- WHEN must the actions start?
- WHEN do the actions need to be completed?

The latest possible start date for the earliest of the actions must be the same as the Impact Date in Impact
10 Date field **910**. The Action Manager field **915** is a mandatory field. The Risk Action Manager must not be the Risk Owner. The Action Manager must be the person named as the Action Manager identified as the person responsible for completing the first of the actions
15 specified in the Next Actions field **914**.

The Risk record holds a number of data items relating to the production of the Bubble Charts **916** such as the vertical offset **917**. However, it is likely that only the Bubble Label can be completed for a new Risk. It
20 is normal to check on the current position of a Risk bubble before amending any of the offset data. The Next Review field **918** is optional. And similar to that described for Next Review **625** above referring to **Figure 6**.

25 Having entered data into each field **901-918**, the user should now save the record by pressing the Save Record button **919**. If the data is free from errors, this will result in an ABCD Risk Management Window indicating

that the risk was saved the reference number allocated to the risk. Clicking on the OK button in this window will return the original Assumption record as shown in **Figure 9B**.

5 Referring now to **Figure 9B**, notice that the screen **940** now contains the main details from the Associated Risk record. One may return to the Risk record by clicking the View button **941**.

10 Selecting the Risks button on the Main Menu will return an Update Risk Record Pop-Up screen. Note that Risks may only be created after first creating an underlying Assumption and then assessing the Sensitivity/Stability Ratings. For this reason, the Update Risk Record pop-up screen allows the user to
15 update an existing Risk but will not allow the user to create a Risk record. As for Issues and Assumptions, there is also the facility to navigate directly to the Risk Browser.

Selecting a Risk record for updating by entering a
20 risk ID into the risk ID field and clicking the find button in the Update Risk Record Pop-up screen will produce screen **965** as depicted in **Figure 9C**. Most of the fields on this screen are described with reference to **Figure 9A** above. The extra details are as follows:

- 25
- Traffic Lights **966** - The Risk screen shown above has a set of traffic lights **966** at the top to give a quick indication of the criticality status of the Risk. If the Impact Date has passed then

an additional red "IMPACTING" message will appear to the right of the traffic lights.

- Linked Assumption **967** - Having created a Risk record the system automatically records a cross-reference to the underlying Assumption. Every Risk record must have one, and only one, underlying Assumption record. Note that this cross-reference cannot be amended once it has been created. In order to examine the underlying Assumption click on the View button **968** to the left of the Assumption field.
- Bubble Label **969** - There is a facility on the Bubble Chart reports to include a user-supplied label. Any text entered here should be concise. The Bubble Chart facility allows the user to print the Risk Reference only, the Bubble Label only or both together.

Each Risk record may have its own set of associated Notes records. Pressing the Notes button **970** produces a meeting notes pop-up window. The actions on this window **975** are as the Issue Notes described.

When all Risk Actions have been completed and the Risk Review Board agrees that the Risk may be closed, the date of closure should be entered into Date Closed field **971** as depicted in **Figure 9C**. If the current date applies, then the user can press the Close button to the right of the field. In exceptional circumstances where a Risk record has to be re-activated, the user should press

the Re-open button to remove the Date Closed field.
Closing a Risk will produce a Risk Closed screen.

Referring now to **Figure 9C**, the instructions here are quite specific. The user should always record the
5 reason why a risk has been closed in the Summary of
Actions Taken field **909**. Having done this, the next
action must be to re-visit the underlying Assumption
record. Depending on the type of action taken with the
risk, the user will now reduce either the Sensitivity or
10 the Stability rating to 'B' (or possibly 'A'). The
underlying Assumption, which became dormant when the Risk
record was created, now becomes active once more. The
Assumption record should remain active until the event
that it describes has occurred.

15 The actions of the various navigation buttons **980-986** at the foot of the screen **965** are described as follows:

- Select Risk **980** - This will produce the update Risk Record pop-up screen as described above.
- 20 • Preview Report **981** - This button **981** will preview a single Risk Interview Sheet. The user may then choose to print the report or not.
- Print Report **982** - This button **982** prints the single Risk Report without giving a preview.
- 25 • Bubble Charts **983** - This button **983** takes the user directly to the Bubble Chart menu as described below. This is a useful feature when

adjusting the position of the bubbles on the chart.

- Create Risk Plan **984** - The button **984** opens up a New Risk Plan screen **1000** as described below with reference to **Figure 10A**.
- Risk Browser **985** - This button **995** will open up the Risk Browser screen as described below.
- Main Menu **986** - This button **986** is present in the bottom right-hand corner of most screens and will return the user to the Main Menu as described previously.

Referring now to **Figures 10A-10C**, various screen shots are depicted illustrating development of risk plans utilizing the Risk Management Tool of the present invention. Pressing the Create Risk Plan button **984** on the Risk screen **965** depicted in **Figure 9C** will present a blank Risk Plan input screen **1000** as shown in **Figure 10A**. The Date Opened field **1001** defaults to the current date, but may be amended to an earlier date. Since the screen **1000** has been invoked from a Risk record, the associated Risk reference number is automatically displayed in the Risk Reference field **1002**. The Plan Description field **1003** is the Title field for the Risk Plan. The Owner field **1004** will initially contain the same name as the Risk Owner. If the Owner of the Risk Plan is a different person, then the field **1004** may be amended in the same way as described above.

The Keyword1 and 2 fields **1005-1006** will initially be the same as the underlying Risk. It is possible to amend each of these fields **1005-1006** as described above. The Action Manager field **1007** will be the same as the
5 underlying Risk. It is possible to amend the field **1007** as described above. The Milestone/Dependency field **1008** is optional. A user enters the text to describe how the Risk Owner will judge the success of the Risk Plan in the Success Criteria field **1009**. Contingency arrangements
10 and/or fallback plans should be included here. Enter text to describe how the Owner will monitor the progress of the Risk Plan in the Monitoring Details field **1010**.

The Summary of Actions Taken field **1011** is the same as described above. The Plan Active field **1012** will
15 default to 'No' and is changed to "Yes" when the plan commences. If the Risk Plan is active, enter the date on which it was activated into the Date Activated field **1013**. The Risk Plan Costs field **1014** is optional. Details are entered into this field **1014** as appropriate.
20 The Next Review field **1015** is the same as described above and is optional. Having entered data into each field **1001-1015**, the user should now save the record by pressing the Save Record button **1016**. If the data is free from errors, this will result in a pop-up window
25 indicating that the risk plan has been saved and the reference number allocated to the risk plan. Clicking on OK on this screen will return the user to the Risk record screen **1030** as depicted in **Figure 10B**. The Risk screen

1030 depicted in **Figure 10B** will now include a reference to the Risk Plan **1031** along with a View button **1032**.

Risk Plans must relate to an underlying Risk record. For this reason, the Risk Plans selector pop-up screen
5 **1040** allows the user to update an existing Risk Plan but will not allow the user to create a new Risk Plan record. If the user enters a Risk Plan Reference number in an Update Risk Plan Record pop-up window selector field, then the screen **1045** as depicted in **Figure 10C** will be
10 presented. This screen **1045** is similar to the New Risk Plan screen **1000** shown in **Figure 10A** and described above with the following additions.

Basic details of the Associated Risk record **1047** are shown at the bottom of the screen. If the full details of
15 the Risk record need to be viewed, then press the View button **1046** to the left of the field **1047**. The actions of the various navigation buttons **1048-1052** at the foot of the screen **1045** are described as follows:

- Risk Plans **1048**- This will produce the same
20 Update Risk Plan Record pop-up screen as described above.
- Preview Report **1049** - This button **1049** will preview a single Risk Plan Interview Sheet. The user may then choose to print the report or not.
- 25 • Print Report **1050** - This button **1050** prints the single Risk Plan Report without giving a preview.

- Risk Plan Browser **1051** - This button **1051** will open up the Risk Plan Browser screen as described below.
- Main Menu **1052** - This button **1052** is present in the bottom right-hand corner of most screens and will return the user to the Main Menu **500** as described above and depicted in **Figure 5**.

Turning now to **Figure 11**, a screen is depicted related to configuring and displaying reports in accordance with one embodiment of the present invention. Pressing the Reports button **505** on the Main Menu **500** will return the Reports Menu screen **1100** as depicted in **Figure 11**. A number of different reports are available from the Risk Management Tool Risk Register by clicking one of report buttons **1101** as follows:

- RRB Reports - These reports are designed for use by the Risk Review Board at review meetings. They contain all the details held, except the associated Notes records.
- Driver Reports - These reports are similar in format to the RRB reports but allow the user to select Risks by Driver.
- Interview List - This is a list of all Owners of Issues, Assumptions and Risks designed to assist with scheduling of interviews.
- Summaries - These reports are landscape reports summarizing Issues, Assumptions and Risk.

- Bubble Charts - Risk Bubble charts are described below.
- Sens/Stab Charts - The Sensitivity/Stability Charts are described below.
- 5 • Statistics - Statistics concerning the active records in the Risk Register are available.
- Interview Sheets - These reports show all the details held on the register for any chosen Issue, Assumption, Risk or Risk Plan, including
10 all associated Notes records. The documents are designed expressly for interviewing owners.

Pressing the RRB Reports button **1101** will produce a screen depicting RRB Reports. As stated above, these reports are specifically designed for presentation to the
15 Risk Review Board. The Month and Year fields which appear on this screen will default to the current month/year and are used to produce the Statistics Report which is contained within the RRB Report. The complete report consists of the following:

- 20 1. Cover Page.
2. Report List.
3. Statistics Report.
4. Selected Reports. Selected by the user as
described below.

25

Issue Reports

11. Issues Raised This Month. This report gives details of all new Issues raised during the

month selected. All new Issues should be presented in the "reading pack" which is sent to members of the Risk Review Board in preparation for the review meeting.

5 I2. Issues Closed This Month. As implied by its name this report gives details of all Issues resolved during the month. It is highly likely that many Issues will appear on both report I1 and I2.

10 I3. Active Issues at Start of Month . In order to complement the view of active Issues, this report includes all those that were already active at the start of the selected month.

15 I4. All Current Active Issue. This report contains all Issues that are open at the time of the report.

20 I5. Critical Active Issues. If time is limited in a Risk Review Board meeting, then it may be more appropriate to present this report which will show just those Issues that are rated with Size 'C' or 'D'.

Risks

25 R1. Risks Raised This Month. Similar to I1 above

 R2. Risks Closed This Month. Similar to I2 above.

 R3. Active Risks at Start of Month. Similar to I3 above.

R4. All Current Active Risks. Similar to I4
above.

R5. Critical Active Risks. Similar to report
I5, this report is intended for Risk Review Meetings
with limited time. All Red Criticality risks are
"showstopper" and action must be taken on these.

Assumptions

A1. Assumptions Raised This Month. Similar to
I1.

A2. Assumptions Closed This Month. Similar to
I2.

A3. Active Assumptions at Start of Month.
Similar to I3.

A4. All Current Active Assumptions. Similar
to I4.

A5. Current Potential Risks. This report
shows all currently active Assumptions that are
rated as BC, BD, CB or DB. In other words, they are
potential risks. This could, of course, include any
that were previously rated as risks, where the risk
has been closed.

A6. Current "No-Risk" Assumptions. This is a
list of all active Assumptions excluding those where
there is an active associated risk record.

Driver reports, selected by clicking the Driver
Reports button **1102**, have been made available to show

Risks selected according to Driver. The report has a front cover, followed by the selected Risk records.

The Interview List, selected by clicking the Interview List button **1103**, has been designed to assist in the scheduling of interviews. Note that the list only shows the names of interviewees that have currently active records. It is more than likely that there will be other "key players" not shown on the list because they do not have any current active records. These people may have new Assumptions caused by a change in the project plans. Note that there is only a Print Preview option for this report; printing is as for other reports.

Interview Sheets for Issues, Assumptions, Risks and Risk Plans may be selected by Owners, Action Managers, or Keywords. Choosing the Issue button **1108**, for example, would return the screen containing a list of issues. In order to choose a record for printing click on the appropriate line in the list. This will highlight the complete line. Pressing the Preview Report command button from this screen will show the Interview Sheet. Double-clicking on the line will have the same effect. This screen gives a preview of a single Interview Sheet prior to printing. The user has the choice at this point to print or not. In order to print the report click on the printer icon on the toolbar or use File, Print... and select a specific printer, number of copies, etc. If one does not need to preview the report before printing, then

click on the Print Report button and the report will go directly to the printer.

Interview Sheets for Assumptions, Risks and Risk Plans operate in exactly the same manner as described above. Note that the Interview Sheets have been designed specifically for use during a one-to-one interview with the Owner. Changes to details may be written on the sheet, which may then be used as a turnaround document in order to update the Risk Register.

10 Summary Reports are available for Issues, Assumptions and Risks. Clicking on the Summaries button **1104** will return a Summary Reports screen. As mentioned above, Summary Reports are available for Issues, Assumptions and Risks and in each case, the user may
15 select all records or may restrict the report to open (i.e. active) or closed records. Note that the Assumptions (All) shows all Assumptions, whereas the Assumptions (No Live Risks) excludes Assumptions where there is a live Risk record associated with it. The user
20 may filter these reports by Keyword1 and/or Keyword2. If all records are to be included, regardless of keyword then the user should click on the "ALL" option. The reports show the summarized details from the chosen records and are printed in Reference Number sequence.
25 Printing the report and closing the screen are as per the Interview Sheets described above. Note that the Summary Reports were originally designed for use at the Risk

Review Meeting but have now been superseded by the Risk Review Reports.

Pressing the Bubble Charts button **1105** in **Figure 11** will return a Bubble Charts Menu screen. There are three
5 types of Bubble Chart available from this menu: 3 Month, 6 Months and 12 Months. As for the Summary Reports, the user may filter the charts by Keyword1 and/or Keyword2. The user may also elect to print the Risk Reference
10 the label or both the Risk Reference number and the label. As for other reports, the user can choose to preview the report or print directly. Note that if there are no Risk records to display then a message indicating this fact will be displayed.

15 It is important to remember that the Bubble Chart is no more than an aid to prioritizing Risks. The diagram cannot be regarded as an accurate diagram when prioritizing the current Risks, since the vertical
20 positioning of the bubbles is under user control as described above. One of the important aspects of the chart is to show Risks that have already impacted and need urgent attention. Impacted Risks are those touching the current date line and to the left of this line. These Risks must be updated as soon as possible by:

- 25 (a) completing the Risk Action(s),
(b) converting the Risk to an Issue, or

(c) revising the Impact Date to a later date (this will only happen where further actions have been identified).

Where Risk bubbles overlap to an extent that the
5 diagram becomes confusing, then the bubbles may be moved
in the vertical plane by entering an offset in the Risk
record. Typical offset values are 3, 6, and 12, but this
will require a little experimentation to avoid a bubble
moving out of its band (Red, Amber or Green) into an
10 adjacent band. The arcs printed on the chart are
included to help decide the priority order when
discussing Risk Actions at the Risk Review Board.
Allowances should be made for any bubble moved out of the
arc due to user-supplied offsets.

15 The Sens/Stab Charts report, selected by clicking
the Sens/Stab Charts button **1106**, presents a graph of all
active Assumptions by Sensitivity and Stability rating.
Clicking on this button **1106** provides a sub-menu. As for
other similar sub-menus the user should select
20 appropriate Keyword1/2 choices before pressing the
Preview Report button.

Pressing the Statistics button **1107** in **Figure 11**
will produce a current statistics screen. The current
statistics screen shows various analyses of the data on
25 the Risk Register. The current statistics screen
comprises six sections:

- Record Counts - This section shows the number of
Issues, Assumptions, Risks and Risk Plan records

- that are currently active (open). The second column of figures examines the Date Opened fields and counts the number of records opened in the month specified at the top of the current statistics screen. The third column examines the Date Closed field. Note that the report will default to the current month. It is possible to amend this by editing the 'This Month' and 'This Year' fields at the top of the form. In order to display the new figures the user must click on the Refresh button. The only data that will change on the current statistics screen will be the totals in the 'Opened This Month' and 'Closed This Month' columns.
- Active Assumptions - This section analyses the currently active Assumptions by their Sensitivity and Stability ratings. It should reflect the Sens/Stab Chart as described above. The 'CC' and above area should also agree with the number of currently active Risks (if it does not, there may be some highly-rated Assumptions that need to be promoted to Risks or, where a risk has recently closed, the Assumption ratings need to be reviewed).
 - Active Issues - Ideally there should be few, if any, active Issues on the register. Where there are active Issues this section analyses them by age, i.e. > 10 means that the Issue was created

more than 10 days ago. Since Issues require urgent attention, there should be few outside the 0 - 30 day range.

- 5 • Active Risks - The Active Risks section analyses the active Risks by Criticality and Controllability. It is possible to have an active Risk with a criticality shown as "OFF". This report will serve as a reminder that these Risks need to be clarified as soon as possible.
- 10 • Risk Impact Dates - This section analyses the number of days until impact for each level of criticality. The top line (<1) represents risks that have already impacted or are impacting today.
- 15 • Driver Analysis - This section analyses active risk records according to their underlying driver.

Referring now to **Figures 12A-12B**, screens related to browsers include in the Risk Management Tool are depicted
20 in accordance with one embodiment of the present invention. There are four browsers included in Risk Management Tool to cover, Issues, Assumptions, Risks and Risk Plans. They may be accessed via the four central buttons **501-504** on the Main Menu **500** in **Figure 5** as
25 described above, or they may be accessed via the Browser Menu. Pressing the Browser Menu button **506** on the Main Menu **500** will return the Browser Menu screen **1200**

depicted in **Figure 12A**. The required browser can then be reached by pressing the appropriate button **1201-1204**.

Pressing the Issues button **1201** produces the Issue Browser screen **1220** as depicted in **Figure 12B**. The
5 browser screen **1220** is designed to filter the Issues according to a number of criteria. The user may select Issues by Owner, Keyword1, Keyword2, Action Manager, Status, Size or a combination of any/all of them. The result of the filter is a reduced list of Issues. The
10 screen **1220** also allows the user to search for records with a specific item of text in the title field.

If the user wishes to examine in more detail a particular Issue record that is displayed within the current selection, then it is necessary to double-click
15 on the chosen record. This will produce the Issue screen as described above and depicted in **Figure 7**.

When the user navigates to another screen, the selection will be lost and the next time that the Issue browser is opened the full selection of (active) Issues
20 will be displayed. In some circumstances it may be useful to retain the selection whilst individual records are being examined. In order to keep the current selection, the "Keep Selection" box **1221** should be checked. If the user wishes to print a selected Issue
25 Interview Sheet, then it is only necessary to highlight the required Issue and press the Selected Issue: Preview **1222** or Print **1223** button. In order to print the complete selection as displayed on the screen, press the

Filtered List: Preview **1224** or Print **1225** button, as required.

The actions of the various navigation buttons **1226-1231** at the foot of the screen are as follows:

- 5 • Assumption Browser **1226** - This button **1226** leads directly to the Assumption Browser. Checking the Keep Selection box **1221** will return to the same selection later.
- 10 • Risk Browser **1227** - Similar to the Assumption Browser.
- 10 • Risk Plan Browser **1228** - Similar to the Assumption Browser.
- 15 • New Issue **1229** - Pressing this button **1229** opens the "New Issue" screen shown in **Figure 6**.
- 15 • Reports Menu **1230** - This button **1230** will open up the Reports Menu screen as described above and depicted in **Figure 11**.
- 20 • Main Menu **1231** - This button **1231** is present in the bottom right-hand corner of most screens and will return the user to the Main Menu **500** as described above.

25 Selecting the Assumption button **1202** provides the Assumption Browser screen which is similar to the Issue Browser **1220**. The Assumption Browser also operates in a similar manner to the Issue Browser **1220**.

The Risk Browser screen **1260** has a similar appearance to the Issue Browser **1220**. The Risk Browser operates in a similar manner to the Issue Browser **1220**,

but includes the additional feature of a report selector. The default report for the "Filtered List" Preview and Print Buttons and are the Interview Sheets. The Report drop-down menu also offers the possibility of
5 previewing/printing the 3, 6 or 12 month Bubble Charts. If one of these options is chosen then a Choose Label pop-up screen will appear before the preview/print. This extra choose label screen enables the user to select the type of bubble label prior to producing the chart as
10 described above. The Bubble Chart Menu screen may be reached directly by pressing the Bubble Charts button at the foot of the Risk Browser screen.

Selecting the Risk Plans Browser button **1204** produces the Risk Plans Browser screen. The Risk Plan
15 Browser operates in a similar manner to the Issue Browser **1220**.

Turning now to **Figure 13**, an exemplary screen illustrating adding keywords to the Risk register is depicted in accordance with one embodiment of the present
20 invention. The list of Keyword1s **1301** and Keyword2s **1302** should be built before any records are added to the register. Of course, it will be necessary to maintain these two lists from time to time. Clicking on the Keywords button **507** on the Main Menu **500** depicted in
25 **Figure 5** returns the Keywords screen **1300** depicted in **Figure 13**. This screen **1300** will allow further entries to each of the tables by clicking on the appropriate New button **1303** and **1304**. To amend an existing record in the

table double-click on the selected line and an add/update keyword pop-up screen will be presented. Enter the required keyword and then press the Save Record button. The Risk Management Tool will then return to the main
5 Keywords screen **1300** as depicted in **Figure 13**.

It is important to note that while the present invention has been described in the context of a fully functioning data processing system, those of ordinary skill in the art will appreciate that the processes of
10 the present invention are capable of being distributed in the form of a computer readable medium of instructions and a variety of forms and that the present invention applies equally regardless of the particular type of signal bearing media actually used to carry out the
15 distribution. Examples of computer readable media include recordable-type media such a floppy disc, a hard disk drive, a RAM, and CD-ROMs and transmission-type media such as digital and analog communications links.

The description of the present invention has been
20 presented for purposes of illustration and description, but is not intended to be exhaustive or limited to the invention in the form disclosed. Many modifications and variations will be apparent to those of ordinary skill in the art. The embodiment was chosen and described in
25 order to best explain the principles of the invention, the practical application, and to enable others of ordinary skill in the art to understand the invention for

various embodiments with various modifications as are suited to the particular use contemplated.